



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/081,752	02/21/2002	Mario Vismara	163-381	9402

7590 10/20/2003

James V. Costigan, Esq.
HEDMAN & COSTIGAN, P.C.
Suite 2003
1185 Avenue of the Americas
New York, NY 10036-2646

EXAMINER

COLETTA, LORI L

ART UNIT	PAPER NUMBER
----------	--------------

3612

DATE MAILED: 10/20/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/081,752

Applicant(s)

VISMARA ET AL.

Examiner

Lori L. Coletta

Art Unit

3612

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 29 September 2003.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☒ The proposed drawing correction filed on 27 December 2002 is: a) ☒ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

Art Unit: 3612

DETAILED ACTION

Claim Objections

1. Claims 1-10 are objected to because of the following informalities:

Regarding claim 1, "said first absorber" (line 5) needs to be changed to

--said laterally-placed first absorber element--. "Said laterally-placed absorber element" (line 7) needs to be changed to --said laterally-placed first absorber element--.

Regarding claim 2, "collapseof" (line 3) needs to be changed to --collapse of--.

Regarding claim 6, "cross member (17A) is made of metal or plastic flat" (line 2) is awkward.

Regarding claim 7, "cross member (17A) is flat is made of metal or plastic and is flat" (line 2) is awkward.

Regarding claim 8, "said first absorbers" (line 5) needs to be changed to --said first absorber elements--.

Appropriate correction is required.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 8-10 are rejected under 35 U.S.C. 102(b) as being anticipated by Rich et al. 5,219,197.

-Art Unit: 3612

Regarding claim 8, Rich et al. '197 discloses a protective structure for vehicles, characterized in that is comprises a shaped front cross member (20) made of metal or plastic having two lateral ends comprising a unitary fillable internal chamber, wherein said front cross member is connected to lateral side members, having at least one underlying laterally-placed first absorber element (40) positioned near the lateral ends of said front cross member, said first absorber elements connected externally after the cross member in the bumper side of the vehicle, and an additional absorber system (30) interposed between said laterally-placed absorber elements in Figure 2.

Regarding claims 9 and 10, Rich et al. '197 discloses the protective structure for vehicles. Even though product-by-process claims are limited by and defined by the process, determination of patentability is based on the product itself. The patentability of a product does not depend on its method of production.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1 and 3-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Terada et al. 5,078,439 in view of Glance 6,443,513.

Art Unit: 3612

Regarding claim 1, Terada et al. '439 discloses protective structure for vehicles, characterized in that it comprises a substantially linear front cross member (13) having two lateral ends comprising a unitary fillable chamber (20, 22, 24 and 23 or 22, 21, 23 and 24), wherein said front cross member (13) is connected to lateral side members (14), and having at least one underlying laterally-placed first absorber element positioned near each lateral end of said front cross member, said first absorber element being connected externally after the cross member on the bumper side of the vehicle in Figures 1 and 2.

However, Terada et al. '439 does not show having at least one underlying laterally-placed first absorber element being positioned near each lateral end of said front cross member, said first absorber element being connected externally after the cross member on the bumper side of the vehicle, and having an additional absorber system interposed between said lateral-placed first absorber element.

Glance '513 teaches a bumper beam (53) mounted to vehicle rails (55) having at least one underlying laterally-placed first absorber element (10) being positioned near each lateral end of said front cross member (53), said first absorber element being connected externally after the cross member on the bumper side of the vehicle, and having an additional absorber system (10) interposed between said lateral-placed first absorber element in Figures 18 and 19.

Regarding claim 1, it would have been obvious to one having ordinary skill in the art at the time the invention was made to make the protective structure for vehicles of Terada et al. '439 with at least one underlying laterally-placed first absorber element being positioned near each lateral end of said front cross member, said first absorber element being connected externally after the cross member on the bumper side of the vehicle, and having an additional

Art Unit: 3612

absorber system interposed between said lateral-placed first absorber element, as taught by Glance '513, in order to provide an improved, lightweight, inexpensive energy absorber with a low ratio of weight to crush force output.

Regarding claim 3, Terada et al. '439, as modified, discloses the protective structure for vehicles, characterized in that said cross member (13) had a substantially straight geometrical structure which is fitted with curved bumper conforming in shape to said underlying laterally-placed first absorber elements and said additional absorber system wherein said absorber elements and said absorber system are interposed between said bumper and said cross member.

Regarding claim 4, Terada et al. '439, as modified, discloses the protective structure for vehicles, characterized in that said underlying laterally-placed first absorber element and said second absorber element are made of materials which deform under pressure of $5-30\text{N/mm}^2$ which corresponds to a crushing of 50%.

Regarding claim 5, Terada et al. '439, as modified, discloses the protective structure for vehicles, characterized in that said first absorber element and said second absorber element comprising absorbing materials selected from the group consisting of extruded thermoplastic honeycomb, honeycomb, made of aluminum, polyurethane foam, formed polypropylene, rigid polyurethane, semi-rigid polyurethane and extrude polyurethane.

Art Unit: 3612

Regarding claim 6, Tereda et al. '439, as modified, discloses the protective structure for vehicles, characterized in that said cross member is made of metal or plastic flat. Even though product-by-process claims are limited by and defined by the process, determination of patentability is based on the product itself. The patentability of a product does not depend on its method of production.

Regarding claim 7, Tereda et al. '439, as modified, discloses the protective structure for vehicles, characterized in that said cross member is flat and is made of metal or plastic. Even though product-by-process claims are limited by and defined by the process, determination of patentability is based on the product itself. The patentability of a product does not depend on its method of production.

6. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Terada et al. 5,078,439 in view of Glance 6,443,513 as applied to claim 1 above, and further in view of Glance 2002/0060462.

Regarding claim 2, Terada et al. '439, as modified, discloses the protective structure for vehicles.

However, Terada et al. '439 does not show inside said cross member, at least one second absorber element is present, which increases the force which will cause the collapse of the cross member and the energy absorber by said cross member and, simultaneously, limits the overall dimensions of the entire structure.

Glance '462 teaches some beams are reinforced with ribs, or an internal bulkhead or other stiffening reinforcement [0003].

Art Unit: 3612

Regarding claim 2, it would have been obvious to one having ordinary skill in the art at the time the invention was made to make the protective structure for the vehicle of Terada et al. '439, as modified, with an absorber element inside the cross member, as taught by Glance '462, in order to provide internal bumper beam reinforcement for lower speed (5 mph) impacts and provide controlled beam crush at higher speed impacts.

Response to Arguments

7. Applicant's arguments with respect to claims 1-10 have been considered but are moot in view of the new ground(s) of rejection.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lori L. Coletta whose telephone number is (703) 306-4614.

The examiner can normally be reached on Monday-Friday 6:30am-3:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Glenn Dayoan can be reached on (703) 308-3102. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-1134.



Lori L. Coletta
October 15, 2003

Lori L. Coletta
Examiner
Art Unit 3612